

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-028

REQUEST:

For the period from May 1, 2016, to October 31, 2016, list each vendor from whom natural gas was purchased for generation and the quantity and nature of each purchase (e.g., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract.

RESPONSE:

Please see STAFF-DR-01-028 Attachment listing each vendor from whom natural gas was purchased for the period from May 1, 2016, to October 31, 2016. Additionally, 100% of the natural gas purchased was on a spot basis.

PERSON RESPONSIBLE: Brett Phipps

Trade Date	Buy/Sell	Trade Number	Supplier	Start Date	End Date	Price / MMbtu	Quantity (MMbtu)
May 2016							
05/17/2016	Buy	3397729	SEQUENT ENERGY	05/17/2016	05/17/2016	\$ 2.10	5,000
05/20/2016	Buy	3399015	SEQUENT ENERGY	05/21/2016	05/23/2016	\$ 1.82	4,247
05/23/2016	Buy	3399459	DTE Energy Trading E	05/24/2016	05/24/2016	\$ 1.88	2,000
05/24/2016	Buy	3399702	DTE Energy Trading E	05/25/2016	05/25/2016	\$ 1.85	2,000
05/25/2016	Buy	3399974	DTE Energy Trading E	05/26/2016	05/26/2016	\$ 1.73	2,000
05/26/2016	Buy	3400233	DTE Energy Trading E	05/27/2016	05/27/2016	\$ 1.81	2,000
05/31/2016	Buy	3401467	SEQUENT ENERGY	05/31/2016	05/31/2016	\$ 3.10	8,000
TOTAL MAY 2016							25,247
JUNE 2016							
06/01/2016	Buy	3401685	SEQUENT ENERGY	06/02/2016	06/02/2016	\$ 2.28	5,000
06/15/2016	Buy	3405298	SEQUENT ENERGY	06/15/2016	06/15/2016	\$ 2.95	25,000
TOTAL JUNE 2016							30,000
JULY 2016							
07/05/2016	Buy	3410936	SEQUENT ENERGY	07/05/2016	07/05/2016	\$ 3.15	20,000
07/06/2016	Buy	3411207	SEQUENT ENERGY	07/06/2016	07/06/2016	\$ 3.25	12,500
07/11/2016	Buy	3412658	SEQUENT ENERGY	07/11/2016	07/11/2016	\$ 3.15	10,000
07/13/2016	Buy	3413223	NJR Energy Servic G	07/13/2016	07/13/2016	\$ 3.05	8,900
07/13/2016	Buy	3413321	SEQUENT ENERGY	07/13/2016	07/13/2016	\$ 3.20	10,000
07/19/2016	Buy	3415427	SEQUENT ENERGY	07/19/2016	07/19/2016	\$ 3.15	5,000
07/21/2016	Buy	3416177	SEQUENT ENERGY	07/21/2016	07/21/2016	\$ 3.15	12,623
07/21/2016	Buy	3416178	NJR Energy Servic G	07/21/2016	07/21/2016	\$ 2.92	9,850
07/25/2016	Buy	3417562	DTE Energy Trading E	07/25/2016	07/25/2016	\$ 2.90	15,000
07/25/2016	Buy	3417589	SEQUENT ENERGY	07/25/2016	07/25/2016	\$ 3.15	7,500
07/26/2016	Buy	3418086	DTE Energy Trading E	07/26/2016	07/26/2016	\$ 2.85	8,000
07/26/2016	Buy	3418202	SEQUENT ENERGY	07/26/2016	07/26/2016	\$ 3.15	15,000
07/28/2016	Buy	3418917	SEQUENT ENERGY	07/29/2016	07/31/2016	\$ 2.66	4,500
07/29/2016	Buy	3419365	DTE Energy Trading E	07/29/2016	07/29/2016	\$ 2.98	5,000
TOTAL JULY 2016							143,873

Trade Date	Buy/Sell	Trade Number	Supplier	Start Date	End Date	Price / MMBtu	Quantity (MMbtu)
AUGUST 2016							
07/29/2016	Buy	3419346	DTE Energy Trading E	08/01/2016	08/01/2016	\$ 2.78	1,000
08/08/2016	Buy	3422863	SEQUENT ENERGY	08/09/2016	08/09/2016	\$ 2.70	1,000
08/09/2016	Buy	3423231	DTE Energy Trading E	08/10/2016	08/10/2016	\$ 2.60	1,000
08/09/2016	Buy	3423289	SEQUENT ENERGY	08/09/2016	08/09/2016	\$ 3.10	10,000
08/10/2016	Buy	3423667	DTE Energy Trading E	08/11/2016	08/11/2016	\$ 2.60	1,000
08/10/2016	Buy	3423672	DTE Energy Trading E	08/10/2016	08/10/2016	\$ 2.80	10,000
08/10/2016	Buy	3423671	DTE Energy Trading E	08/10/2016	08/10/2016	\$ 2.76	4,100
08/10/2016	Buy	3423673	SEQUENT ENERGY	08/10/2016	08/10/2016	\$ 3.00	10,000
08/10/2016	Buy	3423758	SEQUENT ENERGY	08/10/2016	08/10/2016	\$ 3.15	15,000
08/11/2016	Buy	3424128	DTE Energy Trading E	08/12/2016	08/12/2016	\$ 2.55	3,500
08/11/2016	Buy	3424133	NJR Energy Servic G	08/11/2016	08/11/2016	\$ 2.91	13,205
08/11/2016	Buy	3424134	SEQUENT ENERGY	08/11/2016	08/11/2016	\$ 3.15	17,591
08/11/2016	Buy	3424135	TENASKA MARKETING VE	08/11/2016	08/11/2016	\$ 2.92	15,000
08/12/2016	Buy	3424608	SEQUENT ENERGY	08/13/2016	08/15/2016	\$ 2.58	6,000
08/12/2016	Buy	3424636	SEQUENT ENERGY	08/12/2016	08/12/2016	\$ 2.98	5,000
08/12/2016	Buy	3424637	DTE Energy Trading E	08/12/2016	08/12/2016	\$ 2.80	13,900
08/26/2016	Buy	3429132	DTE Energy Trading E	08/27/2016	08/29/2016	\$ 2.68	6,000
08/26/2016	Buy	3429189	SEQUENT ENERGY	08/26/2016	08/26/2016	\$ 3.21	15,000
TOTAL AUGUST 2016							148,296
SEPTEMBER 2016							
09/07/2016	Buy	3432633	DTE Energy Trading E	09/07/2016	09/07/2016	\$ 2.91	9,000
09/07/2016	Buy	3432636	SEQUENT ENERGY	09/07/2016	09/07/2016	\$ 3.08	11,000
09/09/2016	Buy	3433228	SEQUENT ENERGY	09/08/2016	09/08/2016	\$ 3.28	20,000
09/09/2016	Buy	3433294	DTE Energy Trading E	09/09/2016	09/09/2016	\$ 3.05	13,000
08/29/2016	Buy	3434823	DTE Energy Trading E	08/29/2016	08/29/2016	\$ 3.04	689
09/16/2016	Buy	3435091	DTE Energy Trading E	09/17/2016	09/19/2016	\$ 2.68	3,000
09/19/2016	Buy	3435862	TENASKA MARKETING VE	09/19/2016	09/19/2016	\$ 3.29	10,000
09/20/2016	Buy	3436048	SEQUENT ENERGY	09/21/2016	09/21/2016	\$ 3.10	5,000
09/21/2016	Buy	3436287	SEQUENT ENERGY	09/22/2016	09/22/2016	\$ 3.12	5,000
09/28/2016	Buy	3438380	SEQUENT ENERGY	09/27/2016	09/27/2016	\$ 3.40	4,000
TOTAL SEPTEMBER 2016							80,689

Trade Date	Buy/Sell	Trade Number	Supplier	Start Date	End Date	Price / MMBtu	Quantity (MMbtu)
OCTOBER 2016							
10/17/2016	Buy	3442772	DTE Energy Trading E	10/17/2016	10/17/2016	\$ 3.26	4,600
10/17/2016	Buy	3442773	NJR Energy Servic G	10/17/2016	10/17/2016	\$ 3.45	15,400
10/18/2016	Buy	3442956	SEQUENT ENERGY	10/19/2016	10/19/2016	\$ 2.80	20,000
10/20/2016	Buy	3443478	SEQUENT ENERGY	10/20/2016	10/20/2016	\$ 3.05	24,999
10/21/2016	Buy	3443675	SEQUENT ENERGY	10/20/2016	10/20/2016	\$ 3.68	6,001
10/21/2016	Buy	3443677	SEQUENT ENERGY	10/22/2016	10/24/2016	\$ 2.74	4,500
10/21/2016	Buy	3443730	SEQUENT ENERGY	10/21/2016	10/21/2016	\$ 3.10	4,000
10/24/2016	Buy	3444169	SEQUENT ENERGY	10/25/2016	10/25/2016	\$ 2.65	1,000
10/25/2016	Buy	3444416	SEQUENT ENERGY	10/26/2016	10/26/2016	\$ 2.62	1,000
10/26/2016	Buy	3444674	SEQUENT ENERGY	10/25/2016	10/25/2016	\$ 3.21	5,000
10/26/2016	Buy	3444679	DTE Energy Trading E	10/27/2016	10/27/2016	\$ 2.56	2,000
10/27/2016	Buy	3444932	DTE Energy Trading E	10/28/2016	10/28/2016	\$ 2.52	1,500
10/28/2016	Buy	3445130	SEQUENT ENERGY	10/29/2016	10/31/2016	\$ 2.45	4,500
TOTAL OCTOBER 2016							94,500
TOTAL PURCHASES							522,605

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-029

REQUEST:

State whether Duke Kentucky engages in hedging activities for its coal or natural gas purchases used for generation. If the response is yes, describe the hedging activities in detail.

RESPONSE:

Coal:

Duke Energy Kentucky does not engage in hedging transactions with respect to coal purchases. Duke Energy Kentucky contracts for physical deliveries of coal through fixed term coal transactions within a balanced portfolio of purchases. The Company also maintains a portfolio with multiple suppliers to mitigate potential supply interruption risk.

Natural Gas:

To date, Duke Energy Kentucky has not engaged in any forward natural gas price hedging activities. Duke Energy Kentucky engages in the physical procurement of physical natural gas to support its gas generation.

PERSON RESPONSIBLE: Brett Phipps

Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017

STAFF-DR-01-030

REQUEST:

For each generating unit for which a separate coal pile is maintained, state for the period from May 1, 2016, to October 31, 2016, the actual amount of coal burned in tons, actual amount of coal deliveries in tons, total kWh generated, and actual capacity factor at which the plant operated.

RESPONSE:

Plant	Coal Burn (Tons)	Coal Receipts (Tons)	Net MWH	Capacity Factor (Net MWH) / period hrs x MW rating)
East Bend	954,203	933,906	2,143,691	80.9%

PERSON RESPONSIBLE: Theodore H. Czupik Jr.

Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017

STAFF-DR-01-031

REQUEST:

For each natural gas generating unit, state for the period from May 1, 2016, to October 31, 2016, the actual amount of natural gas burned, total kWh generated, and actual capacity factor at which the plant operated.

RESPONSE:

Gas burned by unit is not available.

Month	Fuel Burned	
	MCF Gas	Gallons Propane
May 2016	24,805	415
June 2016	28,937	491
July 2016	140,306	683
August 2016	154,030	663
September 2016	73,532	837
October 2016	95,817	532

Woodsdale Station	Net MWH	Capacity Factor
Unit 1	3,851	1.09%
Unit 2	4,552	1.29%
Unit 3	3,936	1.11%
Unit 4	3,752	1.06%
Unit 5	2,833	0.80%
Unit 6	4,158	1.18%
Total	23,082	1.09%

PERSON RESPONSIBLE: John Swez

STAFF-DR-01-032

REQUEST:

- a. During the period from May 1, 2016, to October 31, 2016, have there been any changes to Duke Kentucky's written policies and procedures regarding its fuel procurement?
- b. If yes,
 1. Describe the changes;
 2. State the date(s) the changes were made;
 3. Explain why the changes were made; and
 4. Provide the written policies and procedures as changed.
- c. If no, provide the date when Duke Kentucky's current fuel procurement policies and procedures were last changed, when they were last provided to the Commission, and identify the proceeding in which they were provided.

RESPONSE:

- a. No. However, the Company identified three written procedure documents to be filed during this FAC. Please see STAFF-DR-01-032 Attachment containing these three written procedure documents, as follows: DEI and DEK Gas Trading Procedure for Off-Premise Transactions, Fuel and System Optimization (FSO) DEK Emissions Trading Process & Procedure Check List, and the Fuel Oil Emergency Procedure – DEK were initiated in April 2015, May 2015 and June 2015 respectively.

- b. There were no changes to Duke Energy Kentucky's written policies and procedures regarding its fuel procurement during the period from May 1, 2016 to October 31, 2016.
- c. The most current natural gas and fuel oil written procedure documents are being provided during this FAC 2017-00005. The most current coal and reagents written procedure documents were provided during January of 2017.

PERSON RESPONSIBLE: Brett Phipps

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Document title:

Fuel Oil Emergency Procedure - DEK

Document number:

STDP-MKT-FSO-00045

Revision No.:

000

Keywords:

emergency, fuels management system procedures, emergency procedures

Applies to:

Regulated Fuels; CT Operations –
 Midwest; Fossil Generation - Midwest

1.0 Overview

The Fuels Procurement Group is responsible for maintaining fossil, combustion turbine (CT) and combined-cycle (CC) power plant fuel oil inventories through the ordering of fuel oil to be delivered to each DEK plant. This procedure outlines the process required when a fuel oil emergency occurs.

2.0 Roles

Oversight: The Director, Gas, Oil & Emissions, will annually or as dictated by process changes review/update this procedure and must approve any exception to this process.

Compliance: The Originator or Trader must manage oil inventory as specified in this procedure.

3.0 Procedure

3.1 Emergency Criteria

- 3.1.1 The Originator or Trader monitor the fuel oil inventory at each site on a daily basis.
- 3.1.2 Portfolio Management provides a morning update of 7 day burn projections of expected fuel oil consumption
- 3.1.3 An emergency situation exists when
 - 3.1.3.1 truck transportation is unavailable or uncertain
 - 3.1.3.2 supply to replenish inventory is unavailable or uncertain
 - 3.1.3.3 at projected consumption levels inventory will be depleted before expected deliveries can restore it.

3.2 Notification

- 3.2.1 The Originator or Trader will notify the Director, Gas, Oil & Emissions and Portfolio Management whenever a fuel oil emergency is identified.

3.3 Emergency Actions

- 3.3.1 The Originator or Trader will seek to locate alternate spot supplies for the site(s) where the emergency exists.
- 3.3.2 Common carrier trucks will be hired to transport this inventory or the inventory at other sites that may be available.

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- 3.3.3 The Originator or Trader will work with plant staff to expand truck unloading hours if required to maximize oil deliveries.
- 3.3.4 Fuels Procurement will work with Portfolio Management to utilize natural gas to conserve fuel oil at the sites with low inventory (if natural gas is available and the site has the capability to burn it).
- 3.3.5 Alternate unit dispatch and power purchases will also be considered to lower fuel oil burn at the low inventory sites.
- 3.3.6 These actions will be continued until inventories are returned to normal levels.
- 3.3.7 The Director, Gas, Oil & Emissions, and Portfolio Management will be informed when the emergency status is no longer in effect.

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Document title:

**FSO – DEI and DEK Gas Trading Procedure
 for Off-Premise Transactions**

Document number:

STDP-MKT-FSO-00042

Revision No.:

001

Keywords:

marketing; FPO gas, oil, and power procedures; FSO gas procedures

Applies to:

Fuels and Systems Optimization
 Department – Duke Energy Indiana
 and Kentucky

I. Purpose:

This procedure defines the process in which off-premise gas procurement, scheduling and trading shall be conducted for all the company's gas generation facilities in Indiana and in Kentucky.

II. Responsibilities:

Gas Trader: Shall be responsible for all purchases or sales of natural gas deemed necessary to maintain system operation and integrity. During times when procurement, scheduling, and trading activities are conducted at approved off-premise locations, all trading and credit guidelines will be followed.

Gas Scheduler: For DEI and DEK the gas scheduling function is performed by third parties under Asset Management Agreements (AMAs).

Manager Gas Trading: Shall review this procedure at least annually, or as necessary, to update based on current permissions. Any modifications to this procedure must be approved by the Manager Gas Trading.

III. Preparation

- A. An on call Gas Trader shall be nominated to be the "on-call" point person during off-premise transaction periods.
- B. The aforementioned individuals shall be responsible to have appropriate means of communication with them at all times. These forms may consist of a home phone, cell phone, and/or computer.
- C. The Gas Trader will have access to the appropriate documents in order to conduct applicable "on-call" responsibilities, such as:
 - 1. Counterparty phone list
 - 2. Duke Energy Corporation On-Call Phone List
 - 3. Most recent credit report
 - 4. Daily set-up sheets showing gas nominations for on-call period
- D. The Gas Scheduler function is provided by third parties under AMA's.

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IV. Trading/Scheduling

A. Should a trade be deemed necessary, the following steps shall be followed:

1. Gas Trader shall call, text or contact via IM counterparties to procure necessary gas or sell excess gas.
2. When gas is procured and/or sold, trader will write down the following:
 - o Counterparty
 - o Trade date
 - o Date of gas flow
 - o Volume (positive volume is a purchase, negative volume is a sale)
 - o Price
 - o Pipeline and respective zone/delivery point
3. Gas Trader will then notify On-Call Gas Scheduler (AMA provider) of the appropriate information.
4. Gas Scheduler (AMA provider) will schedule gas on the respective pipelines EBB, as applicable.

V. Deal Capture

A. On the next business day:

1. The Gas Trader will fill out a spreadsheet (trade blotter), with all applicable trade details.
2. A phone call or instant message will be placed to the counterparty by the Gas Trader or his designee if he is out of the office due to vacation or business reasons, on a recorded phone line or recorded instant message system documenting and confirming the deal that was transacted.
3. The deal is entered into the electronic deal capture system.

Document Approval Form

published 03/16/16

Section A: Document Identification and type of action

Document no.: STDP-MKT-FSO-00042

Revision no.: -002- 001

Document title: FSO – DEI and DEK Gas Trading Procedure for Off-Premise Transactions

Type of action:

- New
 Renumber
 Revision
 Cancellation
 Ownership Change
 Periodic review completed, as required
 Suspension

For Corporate Document Center use only:

- Editorial Change
 Migration
 Control element revision _____
(does not require approval authority signature)

Applies to: (Select all that apply)

- Duke Energy
 Duke Energy Carolinas, LLC
 Duke Energy Progress, LLC
 Duke Energy Florida, LLC
 Duke Energy Indiana, Inc.
 Duke Energy Kentucky, Inc.
 Duke Energy Ohio, Inc.
 Group _____
 Department _____
 Other _____

Security Restrictions Required: Yes No

If yes, explain (see instructions on page 2)

Compliance Applicability: (required field)

- None
 NERC
 State Codes/Standards
 FERC Standards of Conduct
 HIPAA
 Patriot Act
 Sarbanes-Oxley
 Other _____
 OSHA _____

Applicable to forms only: (see instructions on page 2)

- Does the form have a parent, governing or instructional procedure? No Yes (Procedure No: _____)
 How is the form to be completed or used? Hard Copy Completion (by hand) Online Data Entry

- Communication plan established
 Impact Reviews completed

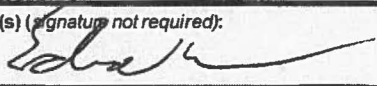
Description of document action or summary of changes:

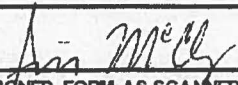
Minor updates to document content

Section B: Approval Who should sign? see instructions on page 2

Preparer(s)/Author(s)/Writer(s) (signature not required):

Ed McCluskey



Approval recommended (print name):	(signature)	Date:
Approval recommended (print name):	(signature)	Date:
Approval recommended (print name):	(signature)	Date:
Final Approval (print name): Jim McClay	(signature) 	Date: 3/15/2016

RETURN SIGNED FORM AS SCANNED PDF VIA E-MAIL OR FAX TO (919) 235-3165

Keywords: procedures and forms; procedures program - general; dal; ADMP-PRO-ADS-00002, corporate document program
 Applies to: Duke Energy

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 Rev. 001 08/15
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Document title: Fuel and System Optimization (FSO) DEK Emissions Trading Process & Procedure Check List	Document number: STDP-MKT-FSO-00038
	Revision No.: 000
Keywords: marketing; FSO gas, oil & emissions procedures	Applies to: Fuels and Systems Optimization Department – Duke Energy Kentucky

1.0 Purpose

The Fuel and System Optimization (FSO) department's includes the Gas, Oil and Emissions group which manages SO₂ & NO_x allowance Cap and Trade programs as well as other REC related programs for Duke Energy Kentucky's generation system as applicable. The purpose of managing these emissions credits for DEK is to ensure compliance with the Federal EPA cap and trade regulations as well as any additional regulation adopted by State or Federal legislation as applicable.

2.0 Responsibilities:

Trader: Trader is defined as the authorized personnel outlined and authorized in the Energy Supply Bulk Power Marketing and Trading Delegation of Authority (DOA). Trader shall be responsible for all purchases, sales, swap and options of emissions and REC credits deemed necessary to maintain system operation and stay within applicable Franchised Electric Risk limits lines and requirements for SO₂ & NO_x allowances and RECs.

Director, Gas, Oil & Emissions: Shall review this procedure as deemed necessary to update based on changes in processes and/or effective State and/or Federal rules.

Designated Representative: This person is the "authorized person" on behalf of Duke Energy Progress that the Environmental Protection Agency (EPA) views as the "responsible official", according to the EPA, that will comply with the reporting requirements of the EPA. Currently staff from Energy Strategy and Policy or from Environmental Health and Safety holds this position.

3.0 Procedure

A. Pre-deal Review Process

- The current year purchase commitments for SO₂ and NO_x as applicable, will be determined by actual emissions generated versus forecasts. Periodic emission forecasts are generated as part of the Duke Energy Kentucky Fuel and Operations Fuel Forecasts (FOF) and the Generation Fuel Forecasts (GFF). These numbers are reviewed by the Trader and compared against the current number of credits or allowances in inventory in the DEK Position Reports maintained by Enterprise Risk Management (ERM). Any discrepancies are then reconciled with ERM.
- Currently there are no REC requirements for DEK.
- The Trader will analyze the FOF/GFF forecasts for current and future years in order to determine Duke Energy Kentucky's position for the need to purchase or potentially sell Emission and REC allowances and credits.
- The Trader will update the emissions position with actual burns and any new forecasts.
- Any potential transaction will comply with the procurement and optimization strategy under the relevant cap-and-trade program and internal credit and risk management guidelines.

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- The Trader will review historical emissions data as a checkpoint for the current forecasts. This is done to determine if any anomalies exist to the current forecast that needs further evaluation.
- The Trader will ensure that any potential transaction complies with internal FAS 133 controls and that no additional accounting considerations are warranted. I.E. – Any trade that could possibly result in a book loss due to internal cost controls.
- The trader will consult credit reports and receive email approval from the appropriate personnel in the Enterprise Risk Management Report as required and abide by applicable Franchised Electric Risk and Credit Limits.
- The trader will comply with the Delegation of Authority levels for approvals required on a trade and escalate the approval process to upper management accordingly.

B. Market Engagement & Execution

- The Trader will call brokers, utilities, or any other holder of allowances or credits and inquire on their desire to sell/buy for the predetermined time period and volume.
- The Trader will consult industry publications for outside views and market commentary to stay abreast of market changes and prices.
- The Trader will then compare offers to determine the best value for the company.
- When the best option has been determined, the Trader will proceed according to the approved strategy. A purchase, sale, swap or option will be entered into with a counterparty and confirmed on a recorded phone turret, pending contract execution and credit approval.
- The trader will send an email to Contract administration, accounting/confirmations and credit explaining the details of the trade and any special circumstances of the prospective deal. Contract administration will set the contract up in CXL in order for the deal to be entered into the system. Once the contract is setup in CXL then Contract Administration will communicate the contract setup to the trader.
- The trader then enters the deal into the system of record. The trade number is then entered into a spreadsheet matrix maintained by the Trader which accounts for all Emissions and REC deals by FSO for Duke Energy Kentucky. The spreadsheet is filed electronically in the following location: (gasshared NT000036/Emissions/Deal Blotter).
- Once the broker confirmation is received or the emails with the counterparty itself confirming the deal, the applicable communication is forwarded to Contract Administration and Confirmations cross referencing the appropriate CXL deal number.
- Front Office will update Emission position report located on FSO's Sharepoint site.
- Trader files appropriate documentation in the electronic emissions folder located in gasshared NT000036/Emissions/Deal Tickets Emails folder.
- Once both parties have a signed contract and approved credit, the seller will transfer credits into the appropriate EPA holding account or other appropriate account database (I.E.GATS/CCX) based on the provisions of the contract. The Trader will receive an email from the EPA confirming that a transfer has been made either to or from the appropriate Duke Energy Kentucky account.
- If Duke Energy Kentucky is buying credits, the Back Office will be notified to wire funds within three (3) business days of the receipt of an invoice, following the transfer of credits from the counterparty selling the credits. If Duke Energy Kentucky is selling credits, the Trader will transfer credits from the appropriate Duke Energy Kentucky account to the counterparty buying the credits. The Back Office, Enterprise Risk Management and Mid Office will also receive an email from the EPA confirming that a transfer has been completed either to or from the Duke Energy Kentucky account.

REQUEST:

- a. State whether Duke Kentucky is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period from May 1, 2016, to October 31, 2016.
- b. If the response is yes, for each violation:
 1. Describe the violation;
 2. Describe the action(s) that Duke Kentucky took upon discovering the violation; and
 3. Identify the person(s) who committed the violation.

RESPONSE:

- a. Duke Kentucky is not aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period from May 1, 2016, to October 31, 2016.

PERSON RESPONSIBLE: Brett Phipps

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-034

REQUEST:

Identify and explain the reasons for all changes in the organizational structure and personnel of the departments or divisions that are responsible for Duke Kentucky's fuel procurement activities that occurred during the period from May 1, 2016, to October 31, 2016.

RESPONSE:

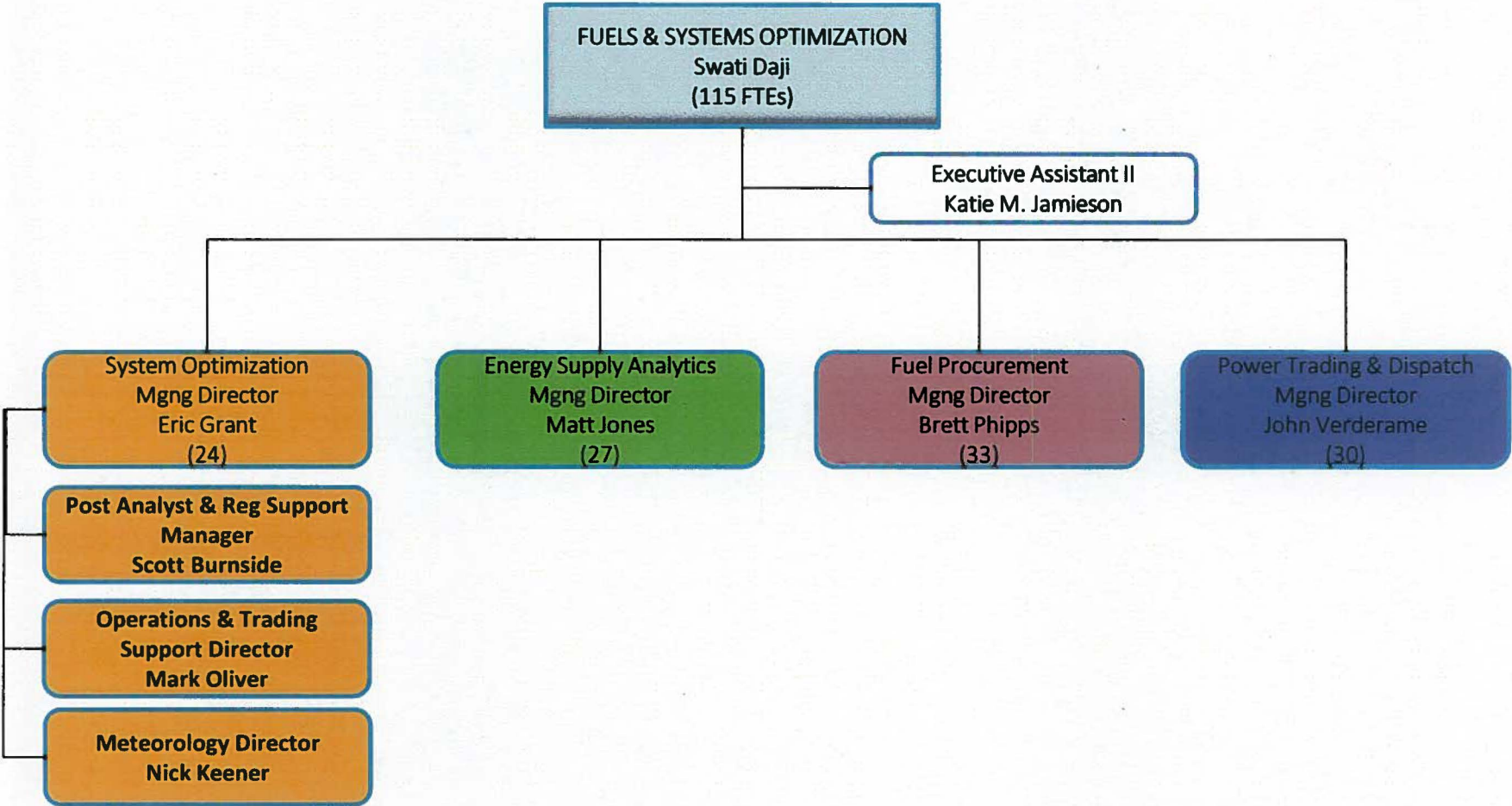
Elliott Batson, Director of Coal, resigned from the company. The Director of Coal position was not filled. Mike Starkey, Sr. Originator had a reassignment to another jurisdiction and Bruce Horsely was given a developmental opportunity for coal origination for Duke Energy Kentucky. Stated in FAC 2016-00005, Eddie Vinson assumed the position of Coal Origination management for all of Duke Energy's regulated businesses and now reports directly to Brett Phipps, Managing Director of Fuel Procurement.

Please see Attachment STAFF-DR-01-034 for revised organizational chart.

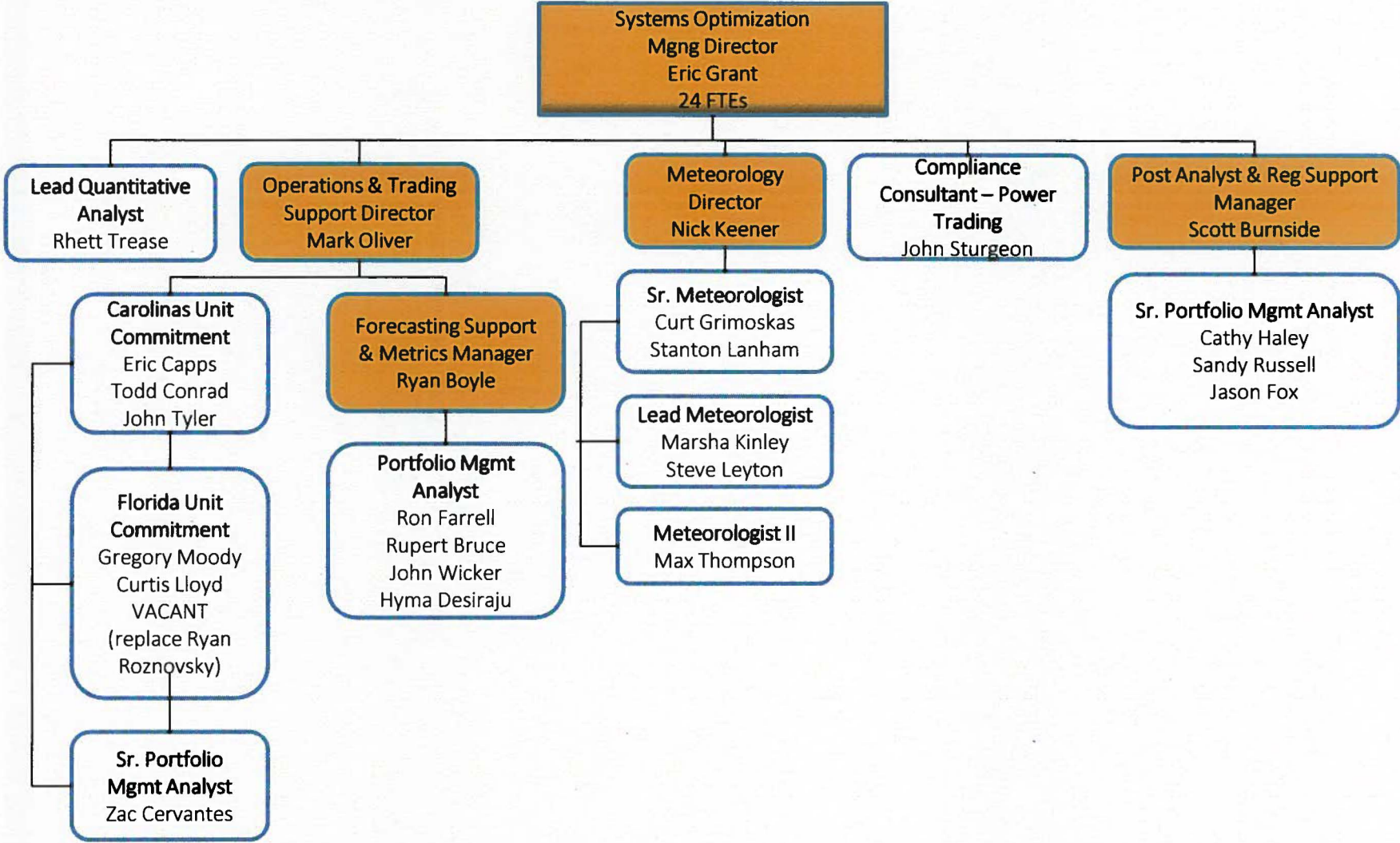
PERSON RESPONSIBLE: Brett Phipps



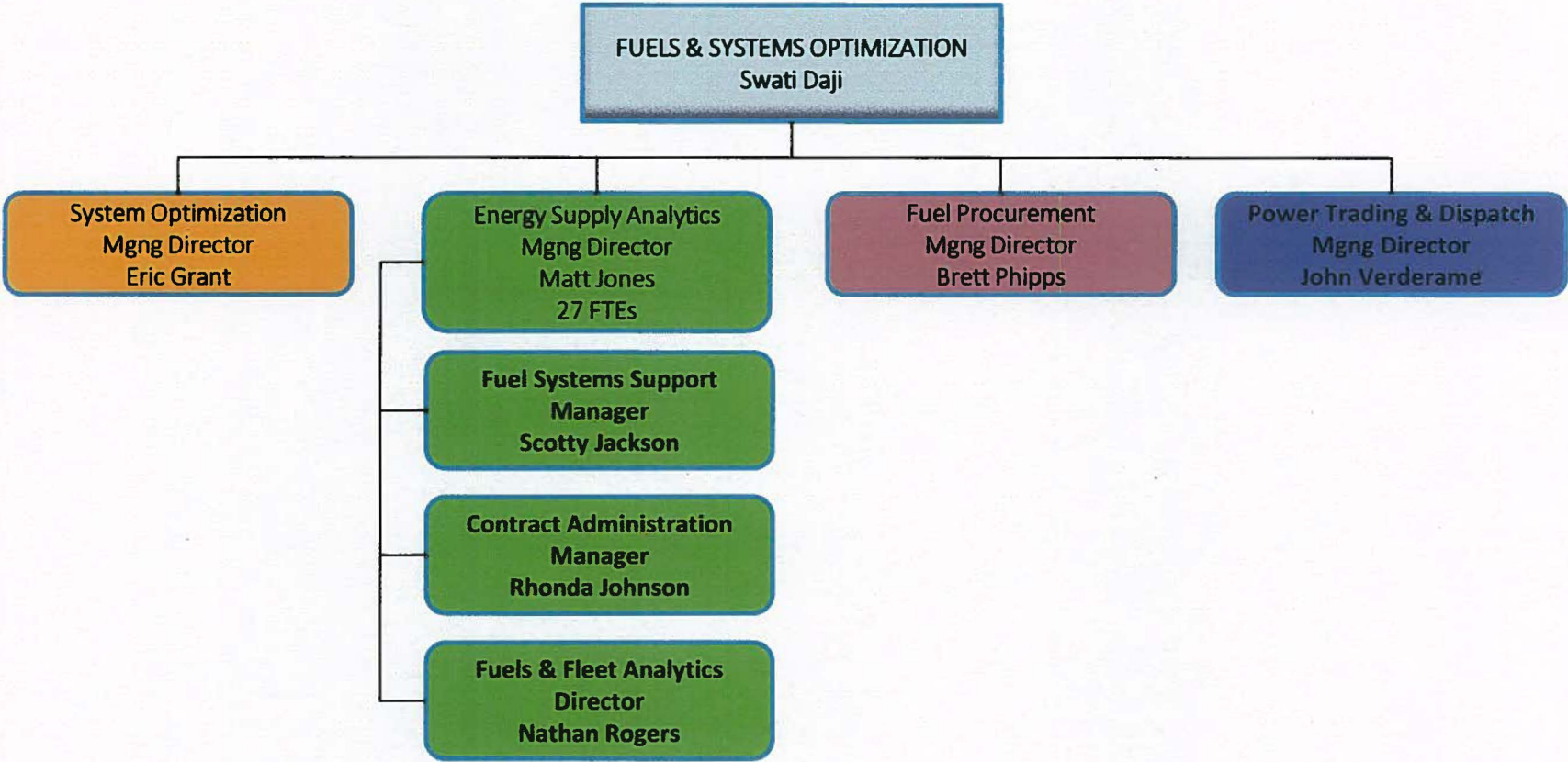
Duke Energy Fuels & Systems Optimization



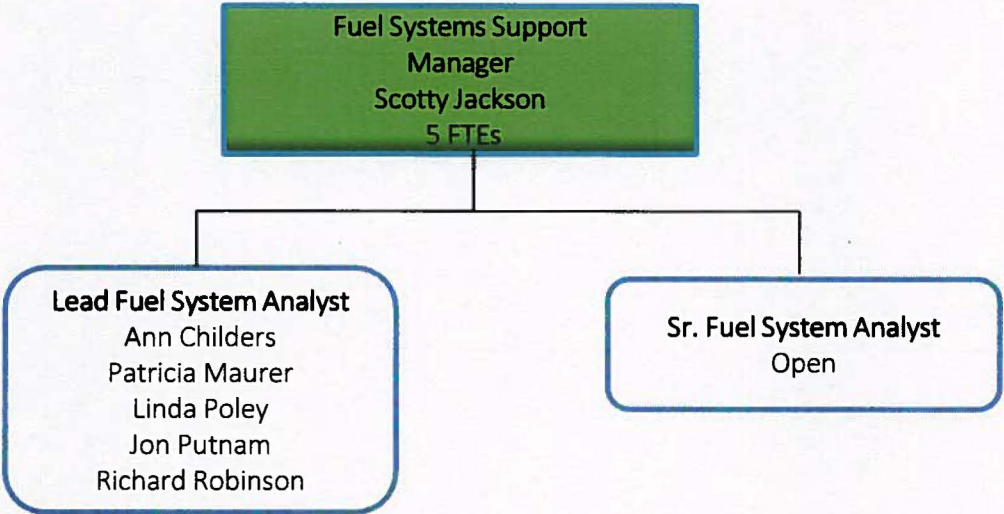
Duke Energy Fuels & Systems Optimization



Duke Energy Fuels & Systems Optimization

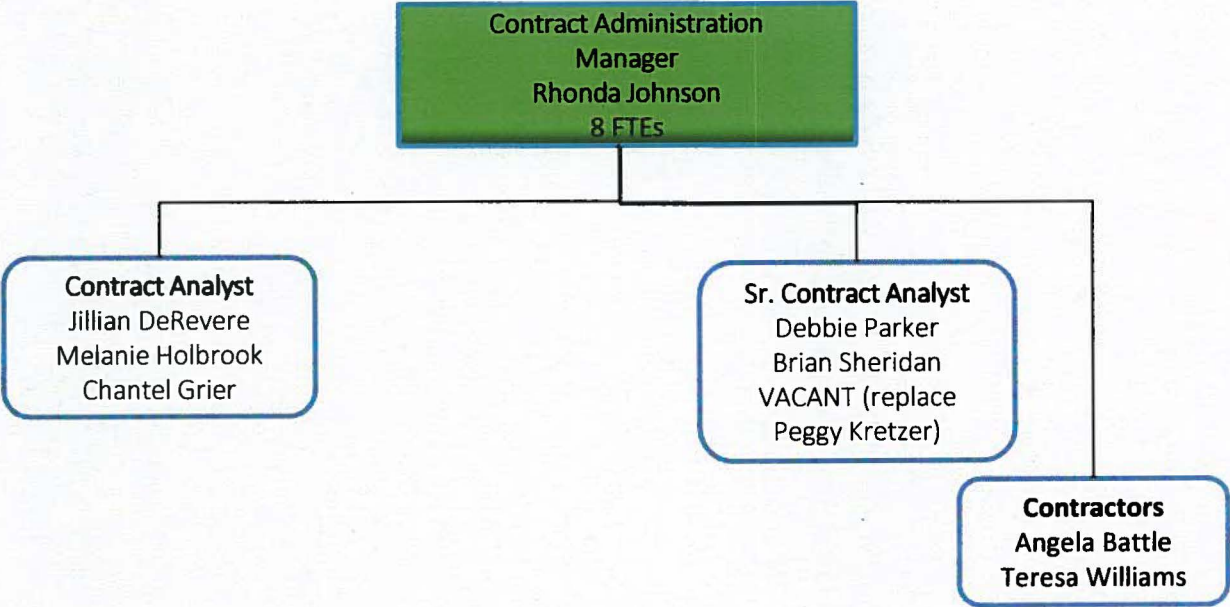


Fuel Systems Support

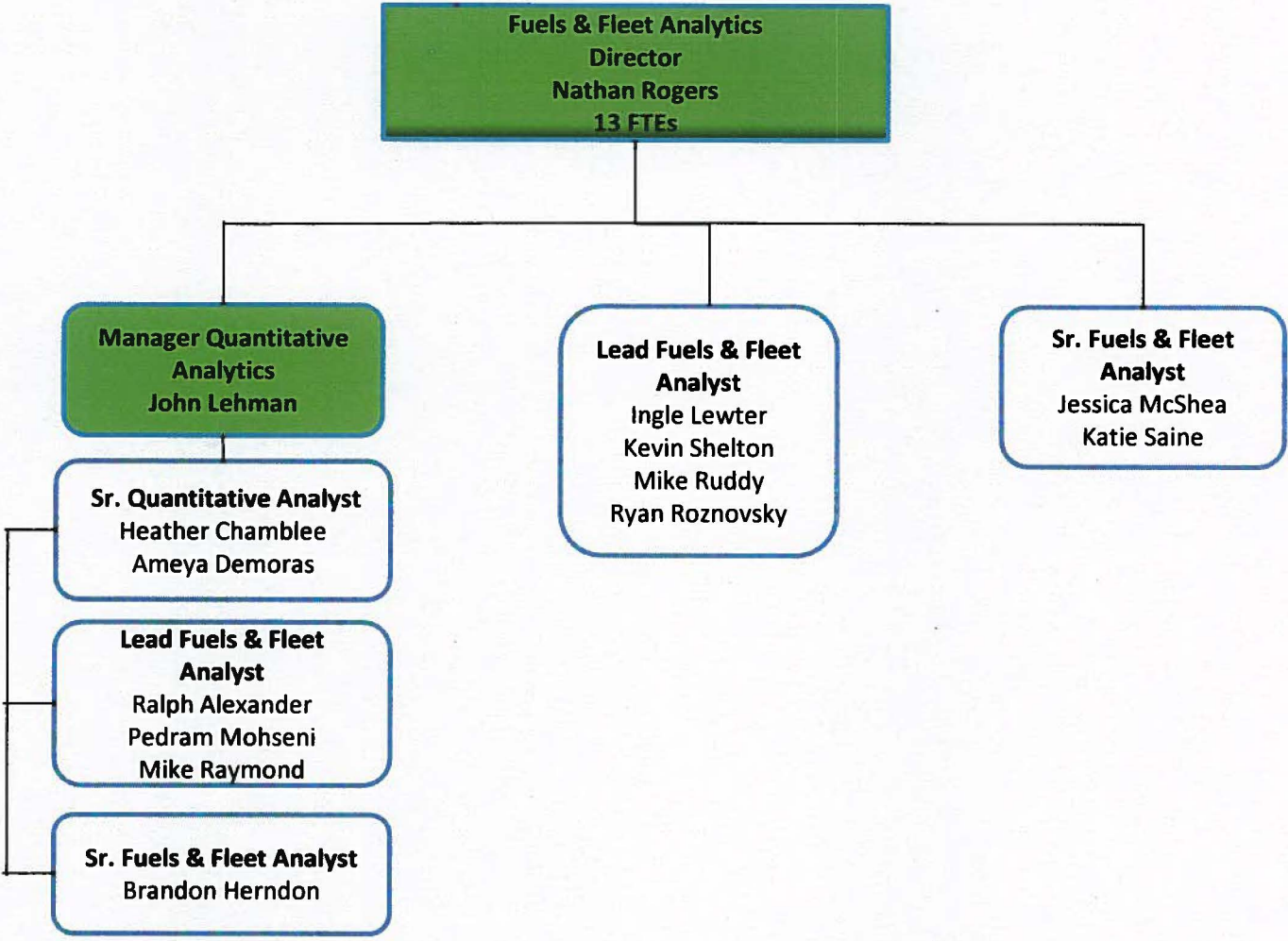


Note that there are two individuals who are mapped to this organization in the HR system, but who are actually employees of a vendor – Fusion. They are simply mapped here for purposes of access to various IT systems. Payments are made to Fusion for ongoing support, and it includes work done by these individuals, who work directly with Scotty Jackson in support of Comtrac, but they are not Contract employees in the traditional sense.

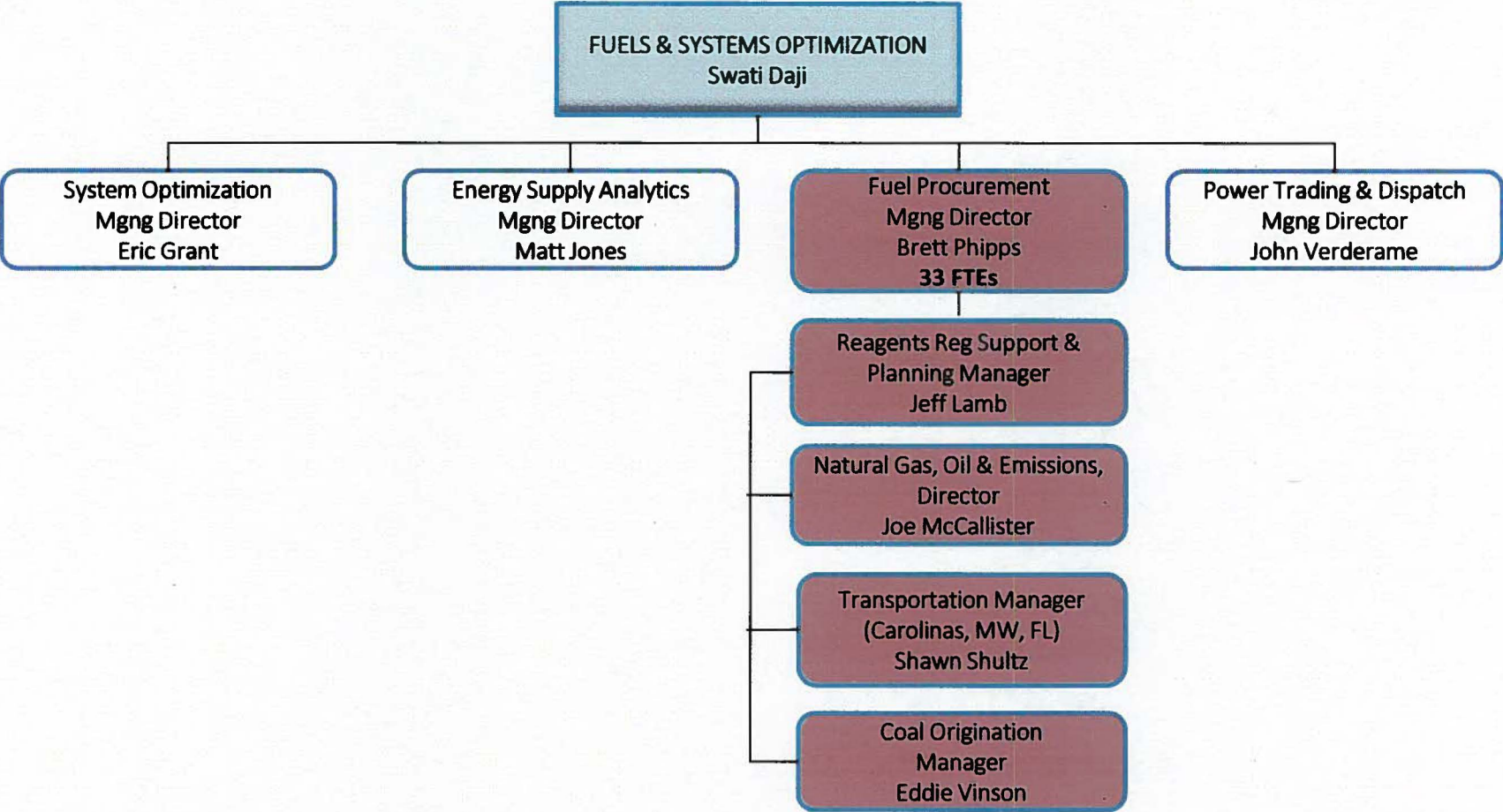
Contract Administration



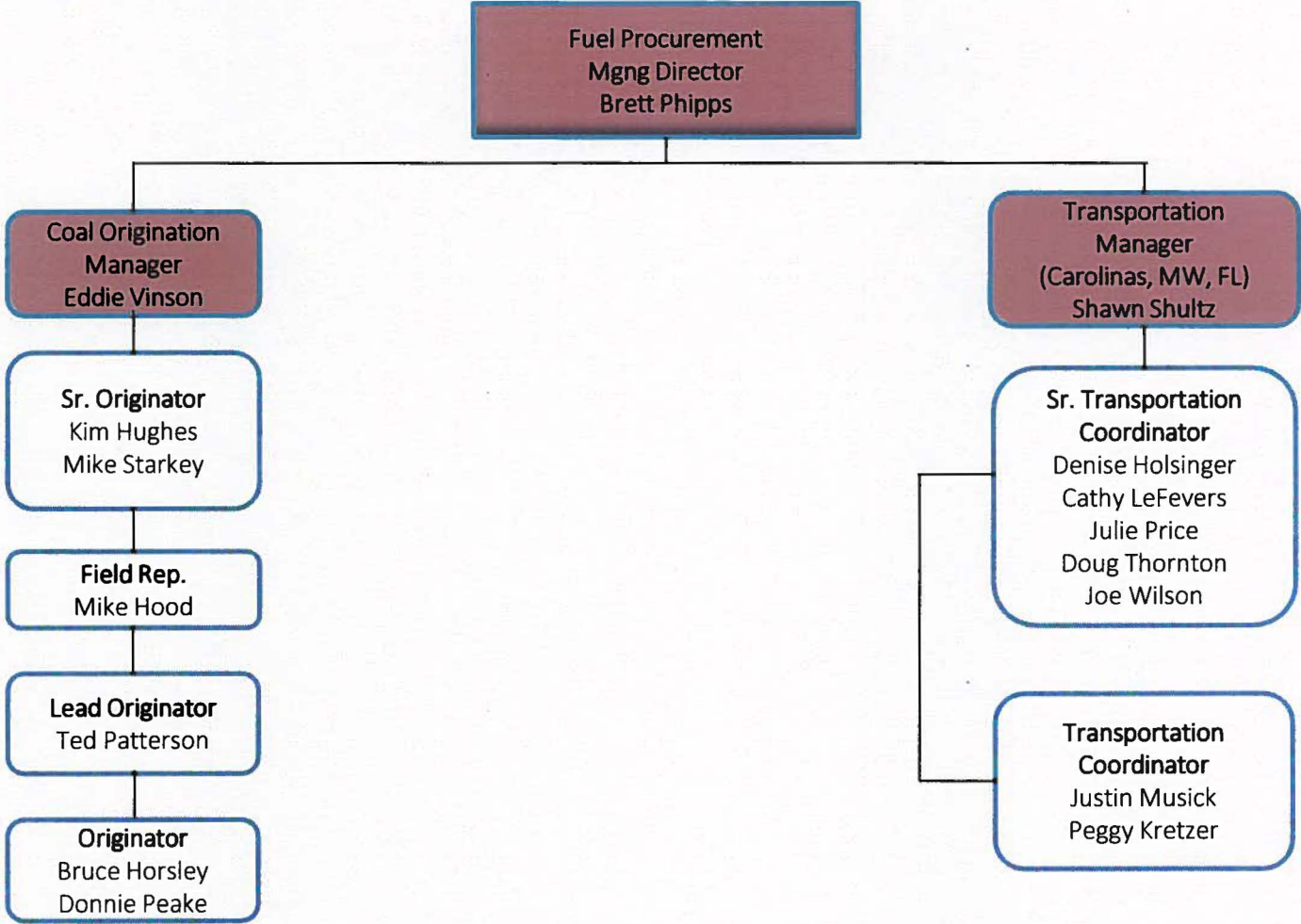
Fuels & Fleet Analytics



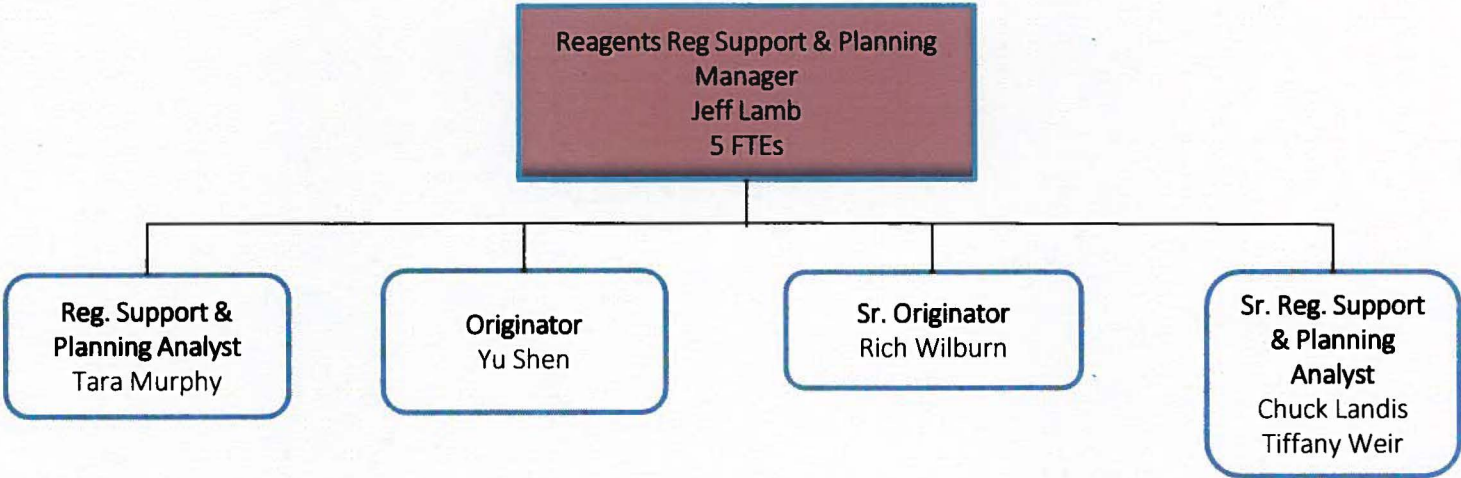
Duke Energy Fuels & Systems Optimization



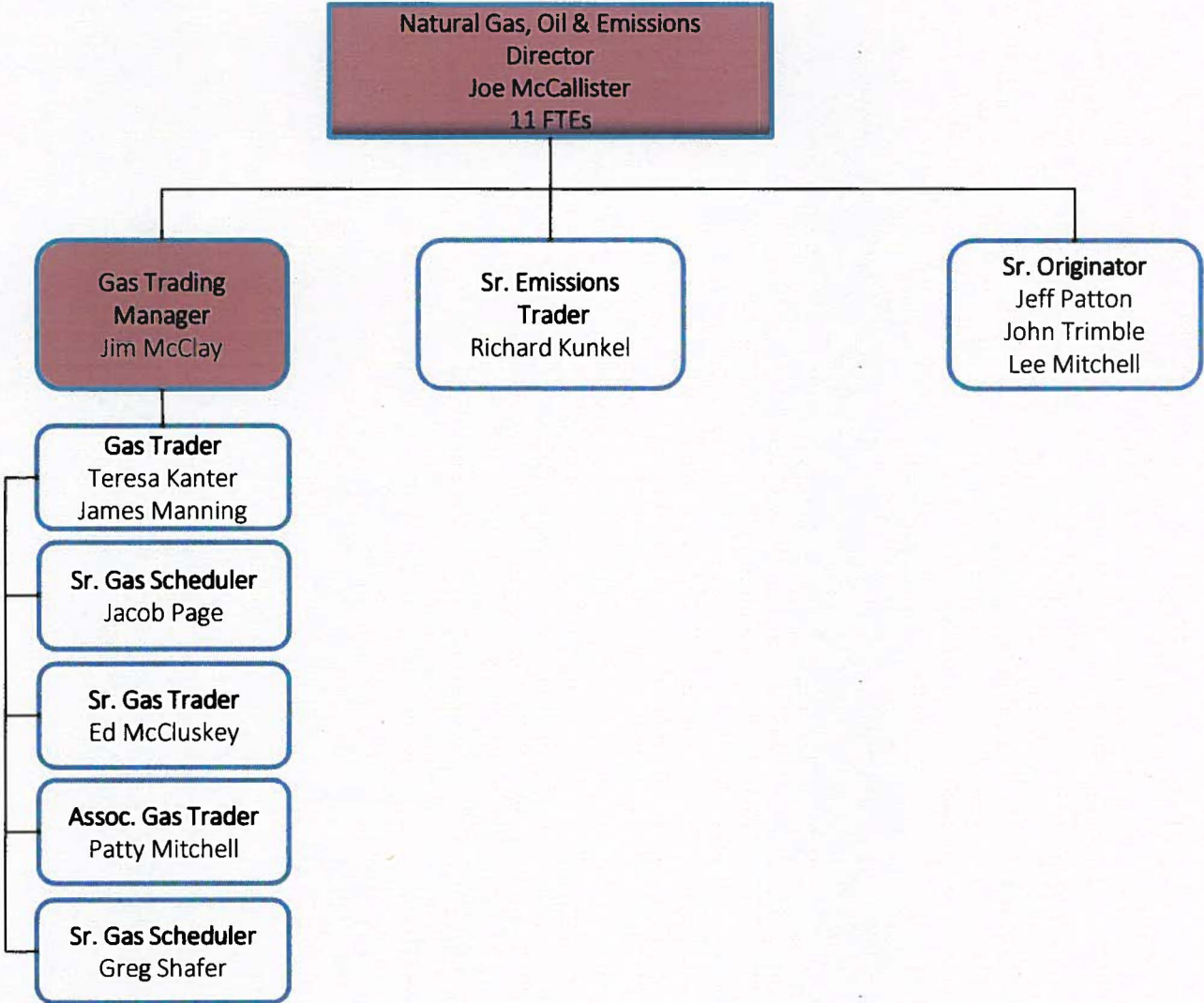
Fuel Procurement



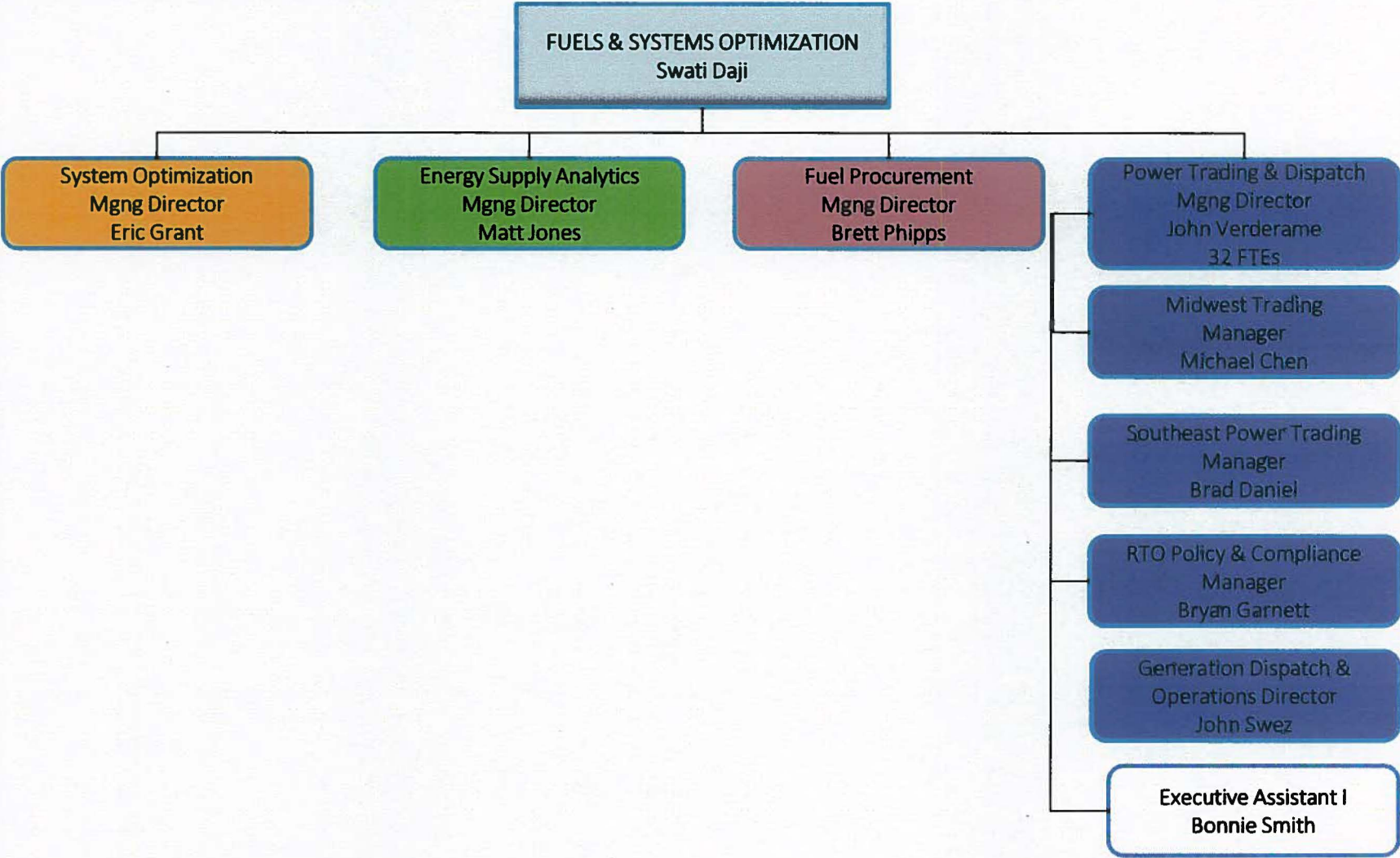
Fuel Procurement



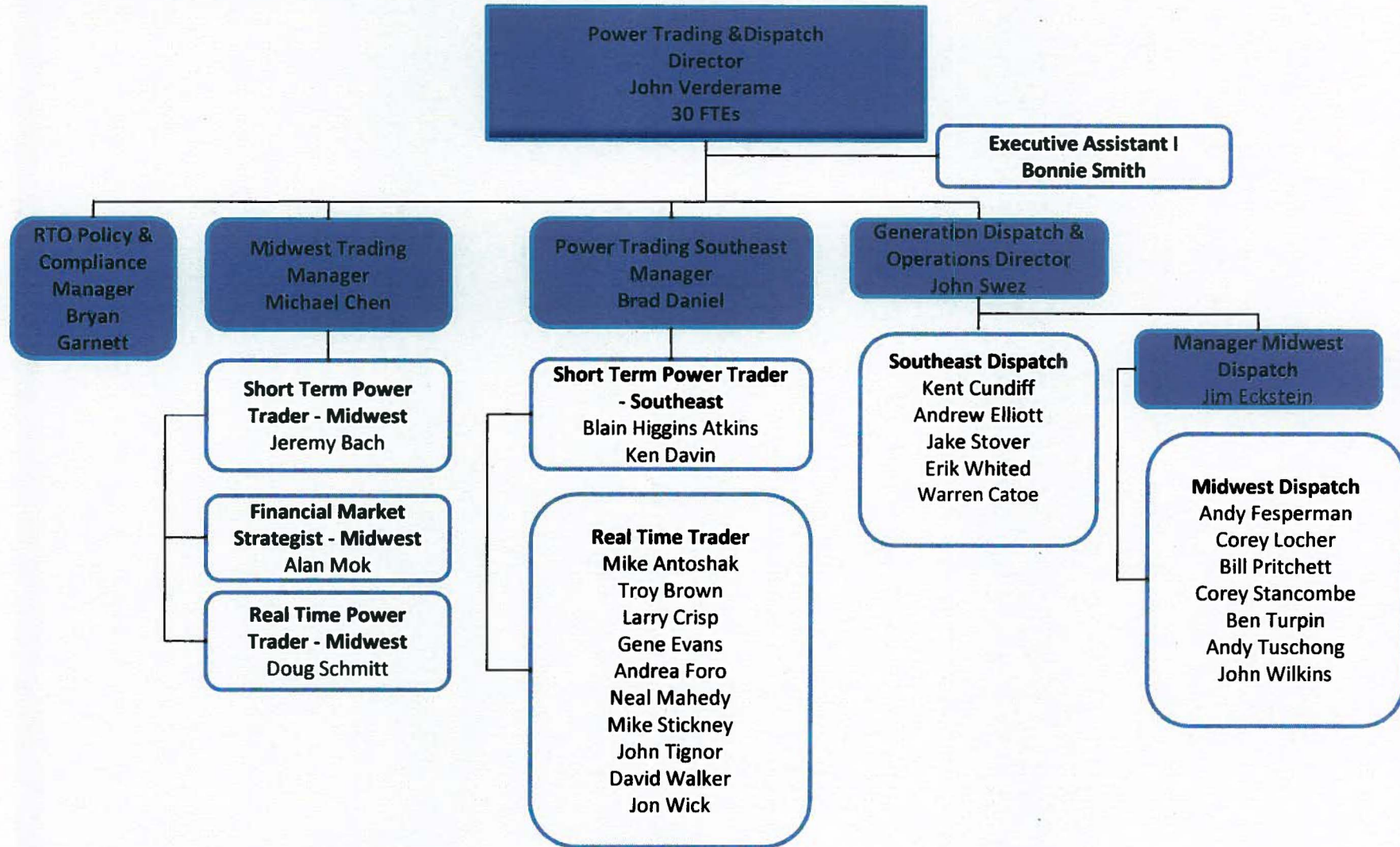
Fuel Procurement



Duke Energy Fuels & Systems Optimization



Duke Energy Fuels & Systems Optimization



STAFF-DR-01-035

REQUEST:

- a. Identify all changes that Duke Kentucky made during the period from May 1, 2016, to October 31, 2016, to its maintenance and operation practices that affect fuel usage at Duke Kentucky's generation facilities.
- b. Describe the impact of these changes on Duke Kentucky's fuel usage.

RESPONSE:

- a. Duke Kentucky made no changes during the period from May 1, 2016, to October 31, 2016, to its maintenance and operation practices that affect fuel usage at Duke Kentucky's coal-fired generation facilities. Duke Energy Kentucky is no longer capable of burning propane at five of the six Woodsdale units due to shutdown of the Todhunter Propane Cavern, permitting limitations, and the inability to cost-effectively test the Woodsdale units and safely replenish the onsite propane storage tanks in order to test the units. The remaining unit at Woodsdale will be unavailable for dispatch on Propane after June 30, 2017.
- b. N/A

PERSON RESPONSIBLE: John Swez

REQUEST:

- a. List all intersystem sales during the period from May 1, 2016, to October 31, 2016, in which Duke Kentucky used a third party's transmission system.
- b. For each sale listed above:
 1. Describe the effect on the FAC calculation of line losses related to intersystem sales when using a third party's transmission system; and
 2. State the line-loss factor used for each transaction and describe how such line-loss factor was determined.

RESPONSE:

- a. Duke Energy Kentucky sells 100% of its generation to PJM Interconnection, L.L.C. These sales are made at the generating station; consequently, no third party transmission was used.
- b. Not Applicable

PERSON RESPONSIBLE: Theodore H. Czupik Jr. / John Swez

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-037

REQUEST:

- a. Describe the effect on the FAC calculation of line losses related to intersystem sales when not using a third party's transmission system.
- b. Describe each change that Duke Kentucky made to its methodology for calculating intersystem sales line losses during the period from May 1, 2016, to October 31, 2016.

RESPONSE:

- a. Not applicable. See response to Staff-DR-01-036.
- b. Not applicable. See response to Staff-DR-01-036.

PERSON RESPONSIBLE: Theodore H. Czupik Jr. / John Swez

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-038

REQUEST:

State whether Duke Kentucky has solicited bids for coal with the restriction that it was not mined through strip mining or mountaintop removal. If the response is yes, explain the reasons for the restriction on the solicitation, the quantity in tons and price per ton of the coal purchased as a result of this solicitation, and the difference between the price of the coal and the price it could have obtained for the coal if the solicitation had not been restricted.

RESPONSE:

Duke Kentucky has not solicited bids for coal with the restriction that it was not mined through strip mining or mountaintop removal.

PERSON RESPONSIBLE: Brett Phipps

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-039

REQUEST:

Provide a detailed discussion of any specific generation efficiency improvements Duke Kentucky has undertaken during the period from May 1, 2016, to October 31, 2016.

RESPONSE:

Duke Kentucky has not undertaken specific generation efficiency improvements during the period from May 1, 2016, to October 31, 2016

PERSON RESPONSIBLE: John Swez

STAFF-DR-01-040

REQUEST:

State whether all contracts related to commodity and/or transportation have been filed with the Commission. If any contracts have not been filed, explain why they have not been filed and provide a copy.

RESPONSE:

Coal

All master agreements for physical suppliers and any master long-term transportation agreements have been filed with the Commission.

Natural Gas

All master agreements for physical suppliers and master long-term transportation agreements have been filed with the Commission.

The existing TETCO OBA (Operational Balance Agreement) is on file with the commission, however, TETCO modified the OBA and the FERC approved Tariff changes went into effect September 15, 2016. These changes streamlined the OBA process and reinforced compliance coverage, and maintained the same level of service under the current OBA. Please see attached modified TETCO OBA.

PERSON RESPONSIBLE: Brett Phipps

**OPERATIONAL BALANCING AGREEMENT ("AGREEMENT")
BETWEEN
TEXAS EASTERN TRANSMISSION, LP
AND
DUKE ENERGY KENTUCKY, INC.**

This Agreement is made and effective as of the 15th day of September, 2016, by DUKE ENERGY KENTUCKY, INC. ("OBA Party") and by Texas Eastern Transmission, LP ("TETLP"), collectively referred to as "Parties" or individually referred to as a "Party".

WITNESSETH

WHEREAS, the pipeline facilities operated by the Parties interconnect at the interconnection point(s) specified on Exhibit 1 attached hereto and incorporated herein by this reference (hereinafter referred to as "Location", whether one or more); and

WHEREAS, Party or Parties have entered into one or more agreements with third party Service Requesters ("Service Requester(s)") for the transportation of natural gas to or from the Location on the Parties' respective systems (said agreements hereinafter referred to as "Service Requester Agreements"); and

WHEREAS, from time to time, dekatherms of natural gas confirmed and scheduled by the Parties to be delivered to or received from the Location (said quantities hereinafter referred to as "Scheduled Quantities") may be greater than or less than the dekatherms of natural gas which are actually delivered at the Location, resulting in inadvertent over- or under-deliveries of the Service Requesters' Scheduled Quantities; and

WHEREAS, the Parties desire to implement an operational balancing agreement in order to facilitate more efficient operations, accounting, and systems management at the Location and on the Parties' respective systems; and

NOW, THEREFORE, in consideration of the premises and mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

Article 1: Operational Parameters

- (1.1) Prior to the date and time of flow at each Location, the Parties shall confirm and schedule Service Requester(s) nominations which will be delivered or received at each Location. Such confirmation between the Parties shall be made electronically via electronic interface system (such as the Parties' Electronic Bulletin Boards or other successor systems), unless otherwise mutually agreed to by the Parties.
- (1.2) The Parties intend that the total dekatherms of natural gas actually delivered and received each gas day at each Location will equal the Scheduled Quantities for said Location. Each Party will allocate the dekatherms that have been delivered and received at each Location among the Service Requester Agreements on its system pursuant to the Scheduled Quantities at each such Location. Any difference between the total actual physical flow of gas and the total of all Scheduled Quantities at each Location for such gas day is defined for the purposes of this Agreement as the "Daily Operational Imbalance". The sum of all unresolved Daily Operational Imbalances at any given time is defined for purposes of this Agreement as the "Cumulative Operational Imbalance". The Parties shall eliminate such Daily Operational Imbalance and Cumulative Operational Imbalance pursuant to this Agreement.
- (1.3) Unless the Parties otherwise mutually agree, the best available operating data for gas flows at the Location shall be used on a daily basis during any current period to determine the estimated

Cumulative Operational Imbalance at the Location, with physical flow adjustments to be made during that current period as mutually agreed to by both Parties to attempt to maintain or achieve a Cumulative Operational Imbalance of zero at the Location. The Cumulative Operational Imbalance shall be calculated by Measuring Party no later than the tenth (10th) day of the following month.

- (1.4) Any Cumulative Operational Imbalance calculated pursuant to paragraph (1.3) above for said month shall be agreed to by electronic interface systems or in writing by the Parties prior to the tenth (10th) day of such month. Such Cumulative Operational Imbalance shall be resolved by the Parties pursuant to mutually agreed upon procedures, which shall be negotiated by the Parties on a not unduly discriminatory basis.

Article 2: Term and Effectiveness

- (2.1) Upon the termination of this Agreement, the Parties agree to reconcile and eliminate any remaining Cumulative Operational Imbalance pursuant to the terms and conditions of this Agreement within thirty (30) days of termination of this Agreement or such other period of time which is mutually agreed upon by the Parties. Or, upon mutual agreement by the Parties, the Cumulative Operational Imbalance may be resolved by cash out according to the provisions of TETLP's FERC Gas Tariff.
- (2.2) Subject to the provisions of this Article 2, this Agreement shall be effective as of the effective date and shall continue from month to month thereafter until terminated by either Party upon not less than thirty (30) days' prior written notice.
- (2.3) Notwithstanding the provisions of Paragraph (2.2), this Agreement can be terminated by either Party under the following conditions:
- (a) Failure by either Party to immediately adjust the operations of its system when informed in writing or by electronic interface system of a critical operating condition(s) by the other Party. A critical operating condition is determined in the sole reasonable judgment of the Party claiming a critical operating condition.
- (b) Failure of the Parties to agree in writing on the final adjusted Cumulative Operational Imbalance prior to the fifteenth (15th) day of the month following the last month gas was delivered; provided, however, if the Parties disagree on the final adjusted Cumulative Operational Imbalance but are diligently working towards a resolution, then this Agreement will not terminate.

Article 3: Miscellaneous

- (3.1) This Agreement and the terms and conditions herein are subject to all present and future valid laws, orders, rules and regulations established by a governmental body with jurisdiction that is applicable to the Parties and this Agreement.
- (3.2) In the event a conflict exists or arises between this Agreement and the TETLP FERC Gas Tariff, as amended from time to time, it is agreed and understood that the latter shall control. This Agreement shall supersede any other agreements with respect to the handling of a Daily Operational Imbalance and the Cumulative Operational Imbalance at the Location.
- (3.3) OBA Party hereby acknowledges and agrees that the provisions of TETLP's FERC Gas Tariff are incorporated herein by reference and made a part of this Agreement for all purposes, and that such FERC Gas Tariff provisions shall be applicable to operations on TETLP's pipeline system, including any and all rights and obligations of TETLP pursuant to this Agreement and any and all rights and obligations of OBA Party pursuant to this Agreement. OBA Party also agrees that it shall be required to comply with all of the creditworthiness requirements in TETLP's FERC Gas Tariff throughout the term of this Agreement.

- (3.4) This Agreement is for accounting and system management purposes only, and is entered into by the Parties with the understanding that the balancing activities provided for hereunder will not subject any non-jurisdictional entity to regulation by the Federal Energy Regulatory Commission as a "natural gas company" under the provisions of the Natural Gas Act. If, at any time, it should be determined that such balancing activities do result in such regulation, then this Agreement shall immediately terminate, and any remaining Cumulative Operational Imbalance shall be resolved pursuant to Paragraph (2.1) of this Agreement.
- (3.5) This Agreement is not assignable.
- (3.6) This Agreement shall be construed in accordance with the laws of the State of Texas without regard to conflicts of law principles. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHTS TO TRIAL BY JURY IN ANY ACTION ARISING UNDER THIS AGREEMENT.
- (3.7) No waiver by either Party of any one or more defaults by the other in the performance of any provision of this Agreement shall operate or be construed as a waiver of any continuing or future default or defaults, whether of a like or different character, or a waiver of each of the Parties' obligations to eliminate a Daily Operational Imbalance or the Cumulative Operational Imbalance by adjusting nominations and, or, deliveries and receipts of gas at the Location, as provided herein.
- (3.8) The Parties intend that there shall be no third party beneficiary to this Agreement. Nothing in this Agreement shall entitle any persons other than OBA Party or TETLP, to any claim, cause of action, remedy or right of any kind relating to the transaction(s) contemplated by this Agreement.
- (3.9) As provided in this Agreement, written notices shall be mailed to the post office address of the Party intended to receive the same, as follows:

(OBA Party):

Address:

139 EAST FOURTH STREET
EA606
CINCINNATI, OH 45202

Texas Eastern:

P. O. Box 1642
Houston, Texas 77251-1642
Attention: Operational Balancing

- (3.10) This Agreement constitutes the entire agreement between the Parties concerning the subject matters of this Agreement, and there are no oral or other written agreements relating to such matters.
- (3.11) This Agreement supercedes and cancels, as of the effective date of this Agreement, the contract(s) between the Parties hereto as described below:

None

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by their duly authorized representatives effective on the date set forth hereinabove.

TEXAS EASTERN TRANSMISSION, LP
By its General Partner
Spectra Energy Transmission Services, LLC

By: Executed Online by SHAMUS P DONAHOE

Name: SHAMUS P DONAHOE

(OBA PARTY)

By: Executed Online by JAMES MANNING

Name: JAMES MANNING

EXHIBIT 1
To the Operational Balancing Agreement
Between
Texas Eastern Transmission, LP
DUKE ENERGY KENTUCKY, INC. ("OBA Party")

KyPSC Case No. 2017-00005
STAFF-DR-01-040 Attachment
Page 5 of 5

Date: 09/15/2016

Location

TETLP

M&R

73280

Description

DUKE ENERGY KENTUCKY CO., OH

TEXAS EASTERN TRANSMISSION, LP

By its General Partner

Spectra Energy Transmission Services, LLC

By: Executed Online by SHAMUS P DONAHOE

Name: SHAMUS P DONAHOE

(OBA PARTY)

By: Executed Online By JAMES MANNING

Name: JAMES MANNING

THIS IS A TRUE COPY OF A SIGNED CONTRACT EXECUTED ELECTRONICALLY ON LINK

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-041

REQUEST:

Identify any issues that could affect fuel costs for the two-year period that remain unresolved or unsettled. Include in the response any issues related to billings from a regional transmission operator. Consider this a continuing request to inform the Commission if Duke Kentucky becomes aware of any issues during the course of this proceeding.

RESPONSE:

The Company is not aware of any unsettled issues for the two-year period that remain unresolved or unsettled that could affect fuel costs. PJM periodically resettles prior periods and has the ability, on its own, to resettle for up to two years. The Company agrees to supplement this response and inform the Commission immediately upon becoming aware of any such PJM resettlements.

PERSON RESPONSIBLE: Scott Burnside

**Duke Energy Kentucky
Case No. 2017-00005
Staff First Set Data Requests
Date Received: February 6, 2017**

STAFF-DR-01-042

REQUEST:

Explain in detail how Duke Kentucky classifies a generation outage as forced or scheduled.

RESPONSE:

The Company uses the North American Electric Reliability Corporation (NERC) Generating Availability Data System (GADS) set of reporting instructions to classify a generating outage or derate. A complete set of reporting instructions can be found at the following link:

<http://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx>

PERSON RESPONSIBLE: John Swez